Problem A: Jabberwockian Words

Side note: for more information about this contest, please visit this website

It was a cold winter's evening and Alice, the charming little girl who not so long ago visited Wonderland after going down the rabbit–hole, was sitting on a great arm–chair at home, talking to one of her kittens, when she pondered for the first time about the "reversed" world that she could see in the big looking–glass above the chimney, and what would she find if only she could get into it.

Knowing Alice's predilection for adventures, it should come as no surprise that, at a moment's notice, she was up on the mantelshelf and going *through* the looking–glass. She entered a room very similar to the one she came from, but she soon realised that this was a very different place compared to the traditional world at this side of the looking–glass.

One of the first things she noticed there was a book; it contained a poem titled *The Jabberwock*, which starts with the following verses:

'Twas brillig, and the slithy toves
Did gyre and gimble in the wabe;
All mimsy were the borogoves,
And the mome raths outgrabe.

"Beware the Jabberwock, my son!
The jaws that bite, the claws that catch!
Beware the Jubjub bird, and shun
The frumious Bandersnatch!"

Figure 1: The Jabberwock

"It seems very pretty," she said when she had finished it, "but it's rather hard to understand! Somehow it seems to fill my head with ideas —only I don't exactly know what they are!"

Indeed, the magic behind many of the words in *The Jabberwock* is that they are obscure and familiar at the same time. At any rate, it is not difficult to form *some* ideas about the unusual words by comparing them with other, more common, vocables with a similar structure.

Your job is to write a program that helps with the analysis of some of these words. You are asked to write a *syllabification* program. For any word given as input, your program has to split it into syllables according to the following rules, where the letter V stands for a vowel and C stands for a consonant:

- Whenever you find *VCV*, insert a division after the first vowel. Example: **galumph** becomes **ga-lumph**.
- Whenever you find *VCCV* or *VCCCV*, insert a division after the first consonant. Example: **frabjous** becomes **frab-jous**.
- The previous two rules *do not apply* if the last vowel is an **E**, and it is the last letter of the word. For example, **wabe** remains as one syllable.

Assume that there are only five vowels: **A**, **E**, **I**, **O** and **U**. Any other letter is a consonant.

Note that these rules do not always separate English words into syllables correctly, but they offer a good first approximation for many words. Be sure to strictly apply these three rules, and only them in your program.

Input

Input starts with a positive integer **T**, that denotes the number of test cases ($T \leq 25000$).

Each test case contains a single word in its own line. The word will contain only lower-case letters from the English alphabet, and the length of every word will be between 1 and 50.

Output

For each test case, print the case number, and then print the given word after inserting hyphen marks (the same character as the minus sign) to separate the syllables according to the rules explained above.

Sample Input

```
8
brillig
borogove
jabberwock
jubjub
bandersnatch
galumph
frabjous
wabe
```

Output for Sample Input

```
Case 1: bril-lig
Case 2: bo-ro-gove
Case 3: jab-ber-wock
Case 4: jub-jub
Case 5: ban-der-snatch
Case 6: ga-lumph
Case 7: frab-jous
Case 8: wabe
```